

REMARKS

Claims 2, 4, 13, 14 and 42-47 stand rejected. Claim 2 has been amended to correct an error of a typographical nature. Claims 2, 4, 13, 14, and 42-47 are pending in the application. Applicant requests reconsideration of the rejections.

Claims 2, 4, 13, 14, and 42-47 stand rejected as obvious in view of U.S. Patent 5,856,263 to Lai et al. ("Lai"), U.S. Patent 6,211,034 to Visokay et al. ("Visokay"), Semiconductor Manufacturing Technology "2001" to Quirk et al. ("Quirk"), and U.S. Patent 5,907,789 to Komatsu ("Komatsu").

To establish a prima facie case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations of the pending claim (MPEP § 706.02 (j)). The cited references do not teach or suggest all the elements of the pending claims.

Claim 2 recites a method of forming a metal-comprising mass for a semiconductor construction that includes providing one or more metallo-organic precursors and exposing the one or more precursors to a reducing atmosphere to release metal from the one or more precursors. Claim 2 further recites depositing the released metal over a semiconductor substrate to form a metal-comprising mass on the semiconductor substrate. Claim 2 is allowable for at least the reason that it recites exposing the one or more metallo-organic precursors to a reducing atmosphere to release metal from the one or more precursors.

Lai describes methods of forming a conformal aluminum film on a refractory metal nitride layer. Lai describes the formation of this aluminum film by first pretreating the surface of the metal nitride layer with a metal-organic precursor prior to the chemical vapor

deposition of the aluminum film. (Col. 4, lines 30-40) Lai describes the use of an inert gas to carry the metal-organic precursor into a chamber containing the substrate upon which the metal-organic precursor layer is to be formed. (Col. 4, lines 45-50) Once in the chamber, Lai describes the formation of a metal-organic precursor layer on the surface of a refractory metal nitride. To summarize, Lai describes the use of an inert gas to transfer a metal-organic precursor to a chamber.

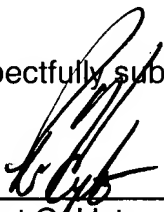
Inert is understood in the art to mean "not readily reactive with other compounds." (Webster's Third New International Dictionary) Furthermore, Lai describes the carrying of an metal-organic precursor with an inert gas and the subsequent formation of a metal-organic precursor layer, the metal-organic remaining intact when exposed to the inert gas. Lai does not teach or suggest exposing one or more metallo-organic precursors to a reducing atmosphere to release metal from the one or more precursors. The limitation of a release of a metal from a precursor by exposure of the precursor to a reducing atmosphere is also not taught or suggested by the remaining cited references. For at least the reason that claim 2 recites a limitation not taught or suggested by the cited references, claim 2 is allowable.

Claims 4, 13, 14 and 42-47 depend from claim 2 and are allowable for at least the reasons described above regarding claim 2.

The title has been amended; claim 2 has been amended; and claims 2, 4, 13, 14, and 42-47 remain pending in the application. Applicant requests allowance of the pending claims in the Examiner's next Action.

Respectfully submitted,

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